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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,940	12/13/2001	Katsuhito Kitahara	P6397a	3867

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EXAMINER	
KANG, ROBERT N	

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/016,940	KITAHARA ET AL.	
	Examiner	Art Unit	
	Robert N. Kang	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Response to Arguments

1. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

2. With regards to the modification of Star Micronics LogoStore disclosed by the Examiner in office action dated 6/28/2006, the applicant has not traversed the examiner's assertion of official notice. MPEP 2144.03 states "a general allegation that the claims define a patentable invention without any reference to the examiner's assertion of official notice would be inadequate... If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because the applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate." Therefore the fact that self-installing programs as well as automatic detection of peripheral parameters were well known at the time of invention can now be regarded as prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebner (US 5,452,094).

Regarding claims 1, 10, and 20, Ebner discloses an invention which "permits logo images to be directly scanned and entered into a small, low cost memory in the copier by the user" (col. 8, lines 20-22). He discloses an alternative embodiment in column 8, lines 36-55, wherein "the logo image storage means 25 comprises an electronic memory card 29 which can be connected to a PC 35 via an image data input/output (I/O) portal 25... the logo image can now be downloaded from the data storage disk 27 to the memory card 29 via the PC 35." He further discloses in column 9, lines 1-14, "the embodiment shown in FIG. 3 allows the user to generate logo images at the PC 35 rather than being required to scan the logo image via the RIS 10. In an embodiment using the PC 35 for logo image generation and storage, the apparatus functions in the same manner described above except that the logo store mode (i.e., scanning the logo before being able to save it) would not be a necessary precursor to implementation of logo copy functions." In Ebner's description of the logo store operation he discloses, "the IPS is instructed to... store a logo... in the logo store mode.. the IPS reads the scanned logo image in step 155 [in the third embodiment this logo image is not scanned but retrieved from the PC 35 through I/O portal 25], stores the image into the logo image data storage means in step 160, and finally names and saves the logo image in step 165" (col. 9, lines 35-41).

Thus Ebner's invention includes step (a), "a step for creating the print data" as it is clearly stated that the user may generate images at the PC 35. With regards to step (b), the "command data set" is the store instruction passed from the PC to the image forming apparatus. Because Ebner makes no mention of direct memory access of the memory unit 25, it is necessary to send a "store" instruction to be executed by the copier processor, rather than directly accessing the memory and writing in the bits from the PC. Therefore, the instruction comprises "a command data set."

Regarding step (c), because both the instruction for storing as well as the actual logo, in addition to any naming or descriptive text of the logo (col. 8, lines 25-32) are sent to the image forming apparatus from PC 35, this transmission comprises a "data storage file containing both the print data and the command data set."

However, Ebner does not expressly disclose step (d), "a file output step for storing the data storage file in a data storage file to the host device via a communication path; wherein the print data is stored in non-volatile storage in the target printer in accordance with the command data set upon the host device reading the data storage file."

Self-installing programs were well-known at the time of invention to those of normal skill in the art (official notice).

Therefore, it would have been obvious at the time of invention to one of normal skill in the art to include the entire store operation of Ebner in a single executable file. This file, when accessed by a host device, would then create the machine-readable (executable by the printer) instructions for a printer for storing the included logo to the

non-volatile memory. Thus, this executable file qualifies as the "data storage file," including both the instructions as well as the logo data, and, would be saved on the host machine, therefore stored "in a data storage medium readable by a host machine." Finally, when a user executes the self-installing program, or "upon the host device reading the data storage file", "the print data is stored in non-volatile storage in the target printer in accordance with the command data set."

The motivation of this modification, like the motivation of all automatic setup programs, is to remove the required user interaction with the program so that the probability of error due to incorrect user instruction is significantly reduced.

Thus it would have been obvious to include the store routine of Ebner's system in a single automatic executable as commonly known in the art to obtain the invention as disclosed in claims 1, 10, and 20.

Regarding claims 2, 11, and 21, a printer driver functions by translating high level instructions such as from a GUI or high level programming language into low level machine readable code or a specific high level printer control language. Thus in either scenario, the storage command must be sent as part of the "command data set" and is executed by the processor of the target printer. Thus "the command data set includes a data storage command set, executable by the target printer, for storing the print data in the non-volatile storage of the target printer."

Regarding claims 3 and 12, when the executable is run, it generates translates high level functions such as "store" into low level assembly or binary instructions to be executed by the printer processor. Therefore, the "command data set" (the high level instructions included in the "command set" included in the "data storage file") **generates** low-level instructions for storing data in the printer, or "a data storage command for storing the print data in the non-volatile storage of the target printer." These limitations are also repeated in claims 25 and 26, and as such the claims are likewise unpatentable.

Regarding claims 4, 5, 13, 14 and 22, the executable file, when run by the host machine, sends over the commands as well as the logo data to the image forming device. Thus there are instructions to enable the transmission across a network protocol or I/O portal. Therefore, there is clearly a "data transmission command set, executable by the host device, for sending the data storage command set and the print data to the target printer."

Regarding claims 6 and 15, a digital copier such as in Ebner is connected via some transmission protocol, whether USB, serial, Ethernet, or any other connection method. The data transmission commands are different for each of these communications methods, since the protocol for each media differs greatly. Thus, the executable file must specify the data format for correct transmission across the communications medium, *regardless if there is only one mode of transmission,* as the

executable itself operates the communications port and protocol. Therefore, the executable file's "data transmission command set comprises communication parameters for connecting the host device with the target printer."

4. Claims 7, 16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebner (US 5,452,094).

The modified Ebner invention meets the requirements of claims 6, 15, and 22, upon which claims 7, 16, and 24 respectively depend.

Ebner does not expressly disclose "an executable command set which, when run by the host device, detects the communication parameters, and sends the data storage command set and print data to the target printer according to the detected communication parameters."

Automatic detection of peripheral parameters (i.e., plug and play or PnP) was a well-known concept and in widely used in the industry at the time of invention (official notice).

Therefore, it would have been obvious at the time of invention to one of normal skill in the art to include an "automatic setup" feature in the aforementioned executable file in order to automatically detect the communications port and parameters for the printer attached to the host device.

The motivation of this modification would be, as with all plug and play devices, to reduce the complexity and probability of error in the setup of peripheral devices.

Thus it would have been obvious to combine the modified Ebner invention with a PnP detection routine as commonly known in the art to obtain the invention as disclosed in claims 7, 16, and 24.

5. Claims 8, 17, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebner (US 5,452,094) in view of Uehara (US 5,297,286).

The modified Ebner invention meets the requirements of claims 6, 15, and 22, upon which claims 8, 17, and 23 respectively depend.

Ebner does not expressly disclose "an executable command set which, when run by the host device, enables inputting the communication parameters including communication settings, and enables setting the communication settings for sending the data storage command set to the target printer based on the input communication parameters."

Uehara discloses in FIG. 3, a set up menu where the user may utilize a graphical user interface to adjust settings, particularly the port of the serial RS-232 port. Generally, this setting may be adjusted from COM1 to COM2, thereby selecting one or the other COM ports to transmit/receive from.

Ebner and Uehara are combinable because they both deal with communications between devices in a computing environment.

Therefore, it would have been obvious at the time of invention to one of normal skill in the art to include in the executable file of the modified Ebner invention a menu screen as taught by Uehara, which allows the selection between communications ports.

This selection would clearly affect the communications settings for sending the "data storage command set" to the printer on the selected port.

The motivation of this modification would be to allow the user to select between a plurality of connected printers using the same executable file.

Therefore it would have been obvious to modify the Ebner/self-installing program combination as taught by Uehara to obtain the invention as disclosed in claims 8, 17, and 23.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert N. Kang whose telephone number is 571-272-0593. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RNK

TWYLER LAMB
SUPERVISORY PATENT EXAMINER